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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/354,945	07/15/1999	AKIO KOSAKA	09952/029001	5787

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EXAMINER

CRAVER, CHARLES R

ART UNIT	PAPER NUMBER
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2682

DATE MAILED: 06/04/2004

24

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/354,945

Applicant(s)

KOSAKA, AKIO

Examiner

Charles R Craver

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5, 6, 8, 12, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaya et al, of record, in view of Ohno, US Pat 5,848,062.

Regarding claims 1 and 8,

Nakaya discloses a radio communication terminal (100) having a battery (127) comprising

power detecting means (131) for detecting remaining battery power (col 4 lines 50-57),

speed setting means (133, col 4 lines 57-61) for setting different data rates (reads radio communication rates) for which the terminal is able to communicate based on the remaining power (col 3 lines 11-25), the speed decreasing as the power decreases (col 3 lines 25-28, col 8 line 31-col 9 line 26), and

control means (110) for controlling data communications at said speeds (col 4 lines 55-61).

Nakaya further discloses that the decreasing rate is done to lower power consumption (col 9 lines 18-26).

Nakaya fails to disclose that the transmission speed may be set.

Ohno discloses an analogous art, that is, means for changing coding speed settings in a portable phone based on battery conditions (col 3 lines 20-48), wherein speed settings may further include lowering the amount of data transmitted over a given period of time, i.e. rate or speed of data transmission (col 5 line 36-col 6 line 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nakaya to change data transmission speed; Nakaya already discloses lowering the rate of data encoding, which would lower the overall amount of data sent in an amount of time (see for example encoding every-other-frame), and Ohno discloses that reducing data transmission speed can further save power. Adding the feature of Ohno would thus reduce battery usage even more and extend battery life.

Regarding claims 5 and 12,

Nakaya discloses a radio communication terminal (100) having a battery (127) comprising

image communicating means (112, 123, 125),

power detecting means (131) for detecting remaining battery power (col 4 lines 50-57),

means to change resolution based on the battery, and that the resolution is directly proportional to the battery charge (i.e. increases with charge, col 5 line 28-col 6 line 29),

speed setting means (133, col 4 lines 57-61) for setting different data rates (reads radio communication rates) for which the terminal is able to communicate based on the remaining power (col 3 lines 11-25), the speed decreasing as the power decreases (col 3 lines 25-28, col 8 line 31-col 9 line 26), and

control means (110) for controlling data communications at said speeds (col 4 lines 55-61).

Nakaya further discloses that the decreasing rate is done to lower power consumption (col 9 lines 18-26).

Nakaya fails to disclose that the transmission speed may be set.

Ohno discloses an analogous art, that is, means for changing coding speed settings in a portable phone based on battery conditions (col 3 lines 20-48), wherein speed settings may further include lowering the amount of data transmitted over a given period of time, i.e. rate or speed of data transmission (col 5 line 36-col 6 line 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nakaya to change data transmission speed; Nakaya already discloses lowering the rate of data encoding, which would lower the overall amount of data sent in an amount of time (see for example encoding every-other-frame), and Ohno discloses that reducing data transmission speed can further save

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power. Adding the feature of Ohno would thus reduce battery usage even more and extend battery life.

Regarding claim 6 and 13,

Nakaya further discloses

image communicating means (112, 123, 125),

display means (103) for displaying received images,

means for inhibiting image transmission based on the remaining detected power, specifically, if detected power is below a threshold, after which the reception means may continue to receive (col 8 lines 30-66). In such a case, the latest received image would inherently be displayed at such a time.

Regarding claim 16,

Nakaya discloses a radio communication terminal (100) having a battery (127) comprising

image communicating means (112, 123, 125),

power detecting means (131) for detecting remaining battery power (col 4 lines 50-57),

means to change resolution based on the battery, and that the resolution is directly proportional to the battery charge (i.e. increases with charge, col 5 line 28-col 6 line 29)

speed setting means (133, col 4 lines 57-61) for setting different data rates (reads radio communication rates) for which the terminal is able to communicate based

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on the remaining power (col 3 lines 11-25), the speed decreasing as the power decreases (col 3 lines 25-28, col 8 line 31-col 9 line 26), and

control means (110) for controlling data communications at said speeds (col 4 lines 55-61).

Nakaya further discloses that the decreasing rate is done to lower power consumption (col 9 lines 18-26).

Nakaya fails to disclose that the transmission speed may be set.

Ohno discloses an analogous art, that is, means for changing coding speed settings in a portable phone based on battery conditions (col 3 lines 20-48), wherein speed settings may further include lowering the amount of data transmitted over a given period of time, i.e. rate or speed of data transmission (col 5 line 36-col 6 line 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nakaya to change data transmission speed; Nakaya already discloses lowering the rate of data encoding, which would lower the overall amount of data sent in an amount of time (see for example encoding every-other-frame), and Ohno discloses that reducing data transmission speed can further save power. Adding the feature of Ohno would thus reduce battery usage even more and extend battery life.

Claims 2-4, 7, 9-11, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaya in view of Ohno and Flynn, of record.

Regarding claims 2 and 9,

Nakaya discloses a radio communication terminal (100) having a battery (127) comprising

power detecting means (131) for detecting remaining battery power (col 4 lines 50-57),

speed setting means (133, col 4 lines 57-61) for setting different data rates (reads radio communication rates) for which the terminal is able to communicate based on the remaining power (col 3 lines 11-25, col 8 line 31-col 9 line 26), and

control means (110) for controlling data communications at said speeds (col 4 lines 55-61).

Nakaya fails to disclose that the transmission speed may be set, or means for detecting an external power supply (charger).

Ohno discloses an analogous art, that is, means for changing coding speed settings in a portable phone based on battery conditions (col 3 lines 20-48), wherein speed settings may further include lowering the amount of data transmitted over a given period of time, i.e. rate or speed of data transmission (col 5 line 36-col 6 line 4).

Flynn discloses the utility of providing battery charging means to a portable device with battery power-level based control (col 7 lines 16-22, col 8 lines 13-30, col 10 lines 8-42), inherently comprising means to detect the presence of the charging means. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add a charger of Flynn and the speed setting means of Ohno to Nakaya. The charger feature would alleviate the need to constantly replace batteries, saving the user money, and was notoriously well known to anyone of ordinary skill in the art as an

obvious improvement in portable battery-powered communication devices. Such a charging step would thus increase the power in the battery, and increase the data rate accordingly, based on the teachings of Nakaya. Further, Nakaya already discloses lowering the rate of data encoding, which would lower the overall amount of data sent in an amount of time (see for example encoding every-other-frame), and Ohno discloses that reducing data transmission speed can further save power. Adding the feature of Ohno would thus reduce battery usage even more and extend battery life.

Regarding claims 3 and 10,

Nakaya further discloses image transmitting means (112), including means to change resolution based on the battery (and thus the charging, col 5 line 28-col 6 line 29).

Regarding claims 4 and 11,

Nakaya further discloses a display (103), and discloses the utility of darkening a display if the battery remaining power drops below a threshold (col 2 lines 7-15); as such, in the combined invention of Nakaya and Flynn, in the case the charger is plugged in and detected and power flows to the battery causing the remaining power to again surpass said threshold, the display would then be relit.

Regarding claims 7, 14 and 15,

Nakaya further discloses power detecting means (131) for detecting remaining battery power (col 4 lines 50-57). In such a case that the charging means of Flynn is not connected to the device, power would not be replenished, and as such the battery power level would decrease; thus, in such a case, the speed setting means would begin

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the process of decreasing the communication speed. In the case of claim 15, the charging would, as stated above in the rejection of claims 4 and 11, cause the device to raise the communications level once said threshold had been surpassed. Said method would inherently operate the same irrespective of the power supply used.

Nakaya further discloses that the decreasing rate is done to lower power consumption (col 9 lines 18-26).

Response to Arguments

Applicant's arguments filed 5-12-04 have been fully considered but they are not persuasive.

Regarding the rejection above under 35 USC 103, the examiner upholds the combination of Nakaya in view of Ohno. Nakaya discloses the utility of changing a codec rate based on the condition of a battery, while Ohno discloses a similar utility, and adds that the transmission rate may be changed.

The examiner disagrees with applicant's assertion that Ohno fails to disclose changing the radio transmission rate, as Ohno states in col 5 lines 42-67 that the transmission rate is specifically changed, so much so that the new rate is transmitted to the Base Station in order for it to change a transmission/reception speed to accommodate the change. Note also in lines 60-62 of col 4, where it is stated that the rate may be specifically reduced by half: "when the data is transmitted at the rate of 32 kbps, a data portion time of a TDMA burst data is reduced to $\frac{1}{2}$, compared to the transmission rate of 64 kbps". As such, by reducing the bits per second sent, the radio

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communication speed is lowered. While the applicant asserts that Ohno changes the radio transmission *time* as opposed to the *speed*, such are equivalent as lowering the amount of time a given amount of data is sent versus a first amount of time means that that data is sent in less time than before, and radio data transmission speed is defined by an amount of data sent in a given time. So by changing the time, the speed is changed. As such, the rejection is upheld.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

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(703) 872-9314 for both formal and informal/draft communications, labeled as such.

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, sixth floor (receptionist).

Any inquiry concerning this or earlier communications from the examiner should be directed to examiner Charles Craver at (703) 305-3965.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Vivian Chin, can be reached at (703) 308-6739.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at (703) 305-4700.

CC

C.Craver

June 1, 2004

U4 6-1-04
CHARLES CRAVER
PATENT EXAMINER